

Appl. No. 10/684,392
Amdt. dated March 07, 2005
Reply to Office action of February 7, 2005

Amendments to the Specification:

- 5 Replace "Title of the Invention" in the "DECLARATION", "ASSIGNMENT OF INVENTION", and "PTO/SB/05" with the title updated when submitting the English translation of the application:

~~High efficiency nitride based light emitting device~~ Nitride light emitting device

- 10 Replace page 6, paragraph 3 with the following modification:

Please refer to Fig. 4. Fig. 4 illustrates a third embodiment of the present invention nitride light emitting device 3. A key difference from the first embodiment is that a transparent oxidizing conductive layer 38 which can be replaced by a transparent conductive metal layer is formed over the rough surface 122 and the N-type contact area 123 for promoting N-type current diffusion.

- 20 Replace page 11, paragraph 2 with the following modification:

In the aforementioned embodiments, the sapphire substrate can also be replaced with at least one material selected from a group consisting of GaN, AlN, SiC, GaAs, GaP, Si, ZnO, MgO, and glass. The nitride buffer layer can be at least one material selected from a group consisting of AlN, GaN, AlGaIn, InGaIn, and AlInGaIn. The N-type nitride semiconductor stack can be at least one material selected from a group consisting of AlN, GaN, AlGaIn, InGaIn, and AlInGaIn. The nitride multiple quantum-well structure emitting layer can be at least one material selected from a group consisting

Appl. No. 10/684,392
Amdt. dated March 07, 2005
Reply to Office action of February 7, 2005

of AlN, AlGa_N, GaN, InGa_N, and AlInGa_N. The P-type nitride semiconductor stack can be at least one material selected from a group consisting of AlN, GaN, AlGa_N, InGa_N, and AlInGa_N. The transparent
5 conductive metal layer 15 can be at least one material selected from a group consisting of Ni/Au, NiO/Au, Ta/Au, TiWN, and TiN. The transparent conductive layer 38 can be at least one material selected from a group consisting of Al, Ti, Ti/Al, Cr/Al, Ti/Au, Cr/Au, Ni/Au, TiW, TiN, WSi, Au/Ge, indium tin oxide, cadmium tin oxide, antimony tin oxide, zinc
10 aluminum oxide, and zinc tin oxide. The transparent conductive oxide layer 49 can be at least one material selected from a group consisting of indium tin oxide, cadmium tin oxide, antimony tin oxide, zinc aluminum oxide, and zinc tin oxide. The ICP dry etching process can be replaced with
15 sputter etching, ion beam etching, plasma etching, or reactive ion etching (RIE) process.